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NOV 19 1991

MEMORANDUM

SUBJECT: Wood Preservative Team Meeting-1991 CAP Audit Proposal Review

FROM: Spencer L. Duffy, Review Manager *SLD*
Special Review Branch

TO: Addressees

There will be a meeting of select members of the Wood Preservative Team on Thursday morning, November 21 at 11:30 am, in the Benefits and Economic Analysis Division's (BEAD) Conference Room, Fourth Floor, Crystal Station One (CS1), 2800 Jefferson Davis Highway, Arlington, Virginia.

The purpose of this meeting is to approve of the proposal and make recommendations to the American Wood Preservers Institute (AWPI) for conducting the 1991 Compliance Audit for the Consumer Awareness Program (CAP). AWPI is required to conduct an annual survey to determine awareness and participation in the CAP. I have attached a copy of the 1991 proposal. Please review it and bring it and your comments to the meeting. The meeting will last no more than 1 hour.

Because this meeting is scheduled near the lunch hour, you may bring your lunch with you if you so desire.

Attachment

Addressees

Sidney Jackson
Barbara Pace
David Stangel
Ronald Stanley

cc: Jack Housenger

**WOOD PRESERVATIVE TEAM MEETING-1991 CAP AUDIT PROPOSAL REVIEW
AGENDA**

I.	Sign-in	11:30
11.	Introductory remarks-RM	11:35
111.	Discussion of Proposal	11:37
1V.	Conclusion(s)	11:57
V.	Recommendations	12:17
VI.	Summary	12:25
V11.	Adjournment	12:30

Notes:

Nov. 21, 1991



Victor E. Lindenheim
President

October 22, 1991

Mr. Spencer Duffy
U.S. EPA
TS 767 C
401 M Street, SW
Washington, D.C. 20460

Dear Mr. Duffy:

As discussed last week, it is AWPI's intent to proceed with and complete a statistically valid survey in 1991, as promised. A proposal has been developed at AWPI's request by Techlaw, Inc., the firm that has conducted an annual audit for AWPI and EPA since 1986. A copy of the proposal is enclosed for the wood preservative team's review.

I believe that Techlaw's survey methodology for 1991 will meet EPA's needs for additional information on the Voluntary Consumer Awareness Program and how it might be strengthened. In fact, the survey objectives, as stated by Techlaw in the proposal, are twofold:

1. to identify the reason(s) for the lack of participation by treated wood wholesalers and retailers; and,
2. to suggest methods to increase participation by these groups.

As discussed, I am requesting a limited deferral of implementation of an outreach program and new consumer feedback mechanisms to improve the VCAP. As you know, since Ms. Hamilton retired and Ms. Nixon left, AWPI does not now have a person on staff with the skills or background needed to implement the expanded VCAP as suggested. However, we do fully intend to implement such a program by spring, 1992. In fact, I have recently been given the authorization to hire a Public Affairs Manager by January, 1992. One of this individual's specified primary responsibilities will be to implement the expanded VCAP I have described to you in my July 15, 1991 letter.

Also as we discussed, I would welcome direct feedback on the VCAP from you or anyone at the Agency who has information on where the program is strong or deficient. For example, you mentioned a specific instance where CIS's were not available at a lumber yard in the Washington, D.C. area. I would be glad to personally see that these deficiencies are remedied.

In fact, having spoken with you, I checked the nearest Hechinger outlet for CIS display and distribution. The Tyson's Corner location also happens to be Hechinger's Highest grossing store -- although this may or may not be true for treated wood sales. I am pleased to report that the CIS's were prominently displayed and page 7 of their current

American Wood Preservers Institute

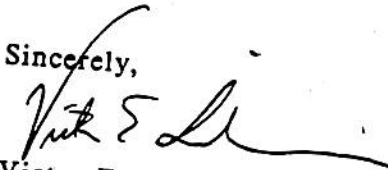
Tyson's International Building, Suite 550
1945 Old Gallows Road, Vienna, VA 22182 (703) 893-4005

Mr. Spencer Duffy
October 22, 1991
Page 2

newspaper insert (copy enclosed) advises the consumer that "preservative treated wood requires special handling" and that they should "ask for information sheets."

We are anxious to proceed promptly with the 1991 audit. I look forward to hearing from you.

Sincerely,



Victor E. Lindenheim

VEL/jcj

Enclosures

cc: Larry Ebner

1991
REVISED
CONSUMER AWARENESS PROGRAM
AUDIT PROPOSAL

Prepared for:

American Wood Preservers Institute
1945 Old Gallows Road
Vienna, Virginia 22182

Prepared by:

TechLaw, Inc.
12600 West Colfax Avenue
Suite C-310
Lakewood, Colorado 80215

Prepared On:

September 4, 1991

REVISED 1991
-CONSUMER AWARENESS PROGRAM
AUDIT PROPOSAL

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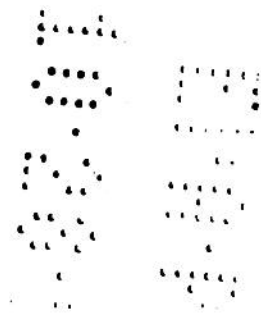
INTRODUCTION

As part of the 1985 Settlement Agreement between the Environmental Protection Agency (EPA) and the American Wood Preservers Institute (AWPI), the Society of American Wood Preservers (SAWP), et al., AWPI agreed to implement and participate in a voluntary Consumer Awareness Program (CAP). The CAP would provide information regarding the safe use and handling of pressure-treated wood to consumers through distribution of Consumer Information Sheets (CISs) by facilities that sell treated wood to the consumer. Participation in the CAP by those facilities would be determined by an annual audit performed by an independent third party. The results of the audit would be provided to AWPI who would, in turn, provide the results to EPA. Since 1986, TechLaw, Inc. has conducted the annual audit program for AWPI.

During the past five years, TechLaw has obtained audit results that indicate consistent trends exist in the rate of participation in the CAP by the wood treating industry made up of chemical formulators, treaters, wholesalers, and retailers. The participation rate of formulators and wood treaters has remained at 100% since 1987. Treated wood wholesalers and retailers maintained a 70% participation rate from 1986 through 1989; however, in 1990, the wholesaler/retailer compliance rate dropped to 45%.

As a result of this marked decrease in participation, AWPI, in consultation with EPA, has directed TechLaw to develop a proposal for an audit program with a dual focus: to identify the reason for the lack of participation in the CAP by treated wood wholesalers and retailers and to suggest methods to increase participation by these groups.

TechLaw, Inc. appreciates the opportunity to submit this revised proposal to perform the 1991 CAP Audit. We believe our knowledge and experience gained over five years of conducting CAP audits for AWPI will be essential in identifying ways to increase compliance with the CAP. We look forward to continuing our relationship with AWPI by providing high-quality information and work products as part of the 1991 CAP Audit. This proposal presents background information about the audit programs previously conducted for AWPI, our revised proposal for the 1991 CAP Audit, and a summary of the benefits that the CAP audit can provide to AWPI.



THE 1986 - 1990 AUDIT PROGRAMS

AWPI retained TechLaw in 1986 to develop and implement a national plan for auditing participation in the CAP by the wood treating industry. Under the CAP, the wood treating industry was to distribute information about the proper use and handling of treated wood in the form of CISs. The audit plan developed by TechLaw focused on the percentage of industry facilities that participated in the CAP by providing CISs to their customers.

TechLaw implemented this plan by conducting surveys or audits of each aspect of the wood treating industry. Telephone surveys were conducted for each of the 17 formulators that produce wood-treating chemicals. Due to the large population of treaters, wholesalers, and retailers, the wholesaler and retailer groups were combined and a statistically valid sample of the each group was determined. Facilities were then randomly selected and audited on-site to determine if they were participating in the CAP.

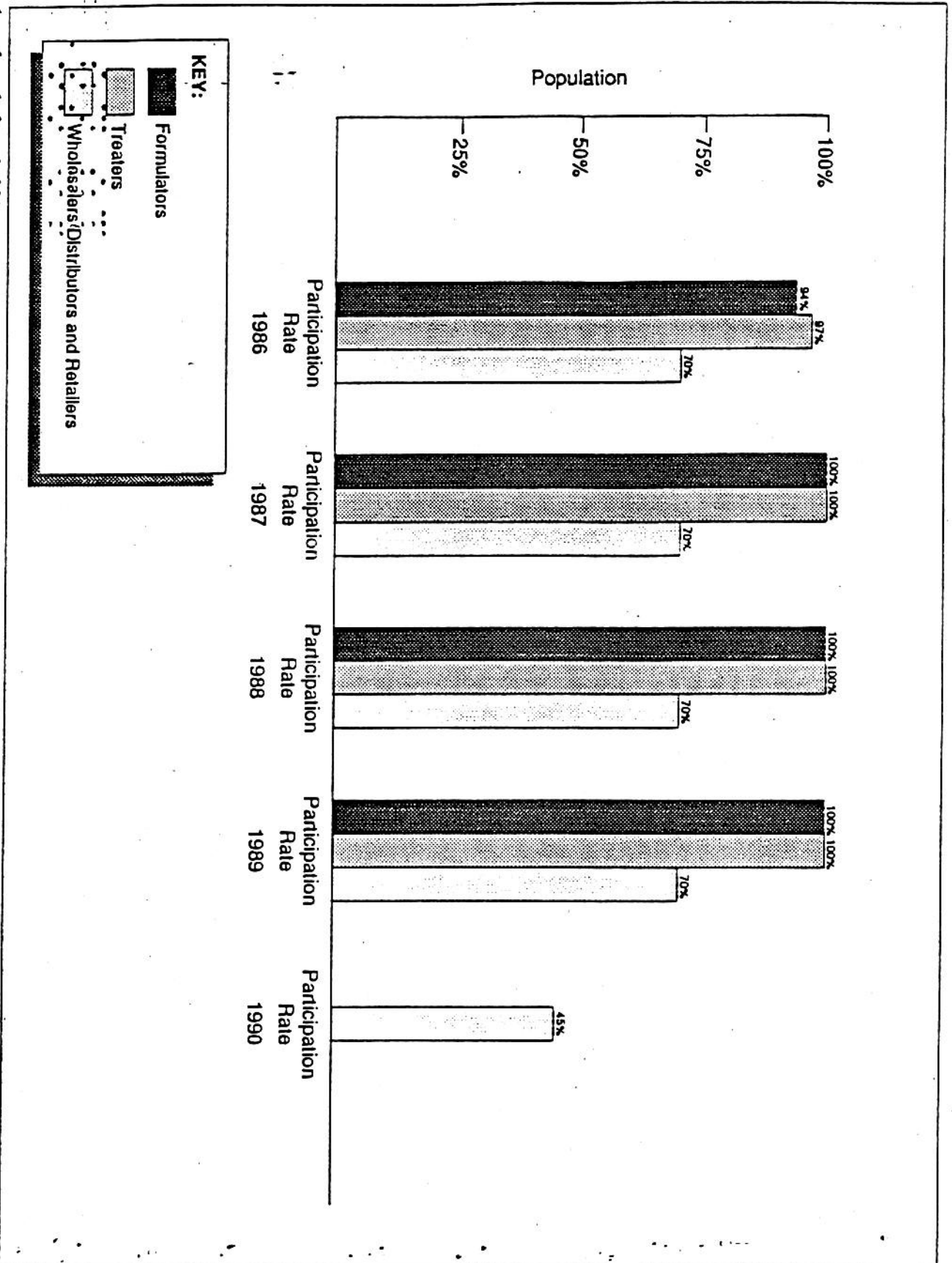
The audit yielded the following results. Ninety-four percent of the chemical formulators surveyed were participating in the CAP, while 97 percent of the treaters and 70 percent of the wholesalers and retailers audited were participating in the CAP. (Figure 1 depicts the participation rates of audits and surveys conducted from 1986 through 1990.)

The following year, TechLaw conducted the 1987 CAP Audit according to the protocols established in 1986. In addition, TechLaw conducted informal telephone surveys of 59 carpenters in three major metropolitan areas. One hundred percent of chemical formulators and treaters were participating in the CAP, with 70 percent wholesaler/distributor and retailer participation. Ten percent of those carpenters surveyed by telephone had received CAP materials.

The CAP Audits conducted in 1988 and 1989 yielded results identical to those produced by previous audits. In 1990, TechLaw was directed to discontinue surveys and audits of chemical formulators and treaters due to their 100 percent participation rate since 1987. On-site audits were continued for wholesalers and retailers because of their lower participation rate of 70 percent. On-site audits were added for facilities found not to be participating in the CAP during the 1986 and 1988 audits. The criteria upon which TechLaw based the participation rates for the 1990 Audit Program were narrowed to provide AWPI with more precise information. During the 1990 CAP Audit, TechLaw also conducted a survey of carpenters to once again provide insight into the percentage of treated wood consumers who had received CISs.

The 1990 CAP Audit results indicated that 45 percent of the wholesaler/distributor and retailer population were participating in the CAP. Audits conducted at facilities previously found not to be participating revealed a 26 percent participation rate. The results of the survey of carpenters showed that 41 percent of those responding had received CISs.

Figure 1. Participation Rates of Audits and Surveys



THE PROPOSED 1991 CAP AUDIT PLAN

During previous CAP Audit Programs, TechLaw auditors have had the opportunity to talk with hundreds of wholesalers and retailers who primarily sell wood treated with arsenicals about the CAP. We've discovered that many of the reasons why wholesalers and retailers fail to participate in the CAP fall under these general categories:

- Wholesalers and retailers are unaware of the CAP, its purpose, and its goals.
- Wholesalers and retailers are unsure whether treated wood is hazardous and whether the distribution of Consumer Information Sheets (CISs) is necessary.
- Wholesalers and retailers are not provided with CISs.
- Wholesalers and retailers are reluctant to participate in a voluntary program that relates to only a small portion of their business.
- Wholesalers and retailers, those facilities most closely connected to the consumers of treated wood, were not provided with an opportunity to identify the most efficient ways in which they could participate in the CAP.

TechLaw will incorporate this knowledge into the redesigned CAP Audit as a basis for determining additional reasons for the lack of participation by wholesalers and retailers. Once we have obtained current information, we will use our total knowledge base to develop suggestions that AWPI could implement to increase participation. TechLaw's proposed audit plan consists of these eight steps:

- revising the audit checklist to obtain additional relevant information,
- modifying the method of facility selection,
- conducting on-site audits of wholesalers and retailers,
- developing a questionnaire regarding participation in the CAP,
- conducting a survey by mail and telephone interviews with additional wholesalers and retailers,
- conducting telephone interviews with formulators, treaters, and major hardware store chains,
- compiling and evaluating the information gathered, and
- providing a report to AWPI that identifies methods to increase participation.

Each step is described in detail below.

Revising the Audit Checklist

TechLaw will revise the audit checklist by expanding its scope. Questions regarding the amount of treated wood sold to consumers by each facility would be added to the checklist allowing participation rates to be calculated based on volume as well as percentage of the entire population. Questions focusing on reasons for participation as well as lack of participation would also become part of the checklist. Revising the checklist in this manner would provide additional information about the facilities audited at no additional cost to AWPI. This information could be used to identify facility characteristics that correlate with lack of participation, giving AWPI the opportunity to provide facilities with similar characteristics information designed specifically to motivate their participation.

Modifying the Method of Facility Selection

TechLaw previously selected the facilities to be audited using the simple random sample selection method. This method gave each facility in the entire population an equal chance of being included in the sample population. The simple random sample selection method was used in conjunction with another statistical method known as estimation sampling for attributes (used to determine the size of the population needed to provide statistically valid information). These statistical methods provided AWPI with a 90% confidence level with a (+) or (-) 10% margin of error that the information gathered from the sample population was applicable to the entire population. The information gathered in this manner, however, was extremely expensive due to the travel costs associated with random selection. In order to limit the costs associated with the 1991 CAP audit, we will modify the method of facility selection.

We will modify the selection process by adapting the cluster sampling method. Cluster sampling involves first selecting large groups, or clusters, as the initial sample population. The final sample population is then selected from the clusters. TechLaw has selected metropolitan areas that contain an EPA Regional or Headquarter office as the clusters. Because TechLaw currently employs auditors in each of these locations, the travel costs associated with the audits will be greatly reduced. The following metropolitan areas, representing at least 25% of the nation's population, will be considered clusters:

- Boston, Massachusetts
- New York City, New York
- Philadelphia, Pennsylvania
- Atlanta, Georgia
- Chicago, Illinois
- Dallas, Texas
- Kansas City, Kansas
- Denver, Colorado
- San Francisco, California
- Los Angeles, California
- Seattle, Washington
- Washington, D.C.

From the clusters, we will randomly select 58 facilities to be audited (using the simple random sample selection method described above) from a list of lumber wholesalers and retailers provided by a national commercial directory. This method will provide AWPI with a statistically valid sample of facilities in these metropolitan areas with an 87.5% confidence level with a 10% margin of error. The confidence level and margin of error of the information provided by this sample are nearly identical to those used during previous audits, yet can be provided at a significantly lower cost. This information will be provided to AWPI along with the corresponding percentage of the population of the continental United States served by the lumber wholesalers and retailers in these clusters.

Conducting On-site Audits of Wholesalers and Retailers

TechLaw will conduct on-site audits of 55 wholesaler and retailer facilities. Using a sample size similar to that approved by AWPI since 1987, we will conduct the audits using the protocols developed during the past five audit programs. In addition to providing AWPI with information gathered in a proven manner, the on-site audits will also serve as a tool to educate wholesalers and retailers about the CAP by providing each facility with receive information about the CAP.

Developing a Questionnaire

To supplement the information obtained during the on-site audits, we will to develop a questionnaire that focuses on wholesaler and retailer participation in the CAP. Respondents to the questionnaire would be asked to provide information concerning their knowledge of the proper use and handling of treated wood, the CAP, and their reasons for participating or not participating in the CAP. In addition, respondents would be asked to consider discussing the information they have provided in a follow-up telephone interview.

Conducting the Survey and Telephone Interviews with Wholesalers and Retailers

TechLaw will mail a questionnaire, along with an example CIS, to 1000 randomly selected wholesalers and retailers throughout the continental United States. The survey would serve a dual purpose: it would provide information regarding the level of participation in the CAP by wholesalers and retailers while concurrently educating each recipient of a questionnaire. Additionally, each respondent will be asked to indicate if they would like to participate in a follow-up telephone interview. Of those respondents interested in participating, we will interview those respondents who have unique concerns or ideas regarding participation in the CAP.

In order to obtain the greatest number of responses, we will offer an incentive to those wholesalers and retailers who respond to the survey. To motivate wholesalers and retailers to respond to the survey, we will randomly select three respondents and award a \$250 American Express gift certificate to each to thank them for their participation in the survey.

Conducting Telephone Interviews with Formulators, Treaters, and Major Hardware Store Chains

While the level of participation by both formulators and treaters is excellent, interviewing members of these groups may provide ideas and opinions regarding participation in the CAP by their customers: wholesalers and retailers. Treated wood wholesalers and retailers are often part of a major hardware store chain that sells treated wood along with many other items. Participation in the CAP by these chains of stores may be one avenue to increase participation. Conducting an interview with an employee of the chain's headquarters may result in the discovery of a method that could be used to motivate individual stores to participate in the CAP.

To accomplish this goal, TechLaw will contact five major formulators, twenty treaters, and ten major hardware store chains to gather information regarding the contribution these groups can make to increase participation in the CAP.

Compiling and Evaluating the Information Gathered

TechLaw will enter the information obtained from the on-site audits, mail surveys, and telephone interviews into a computer database. The database will be constructed in a manner allowing us to provide AWPI with information presented in a variety of formats developed to, for example, calculate percentages or identify trends. Once the data has been compiled, we will evaluate it to identify which methods and ideas currently appear to be the most successful in motivating wholesalers and retailers to participate, and which methods and ideas could be implemented to increase participation by these groups.

Providing a Report to AWPI

At the conclusion of the audit program, TechLaw will provide AWPI with a report containing the following information:

- the procedures and assumptions we used to collect information through on-site audits, mail surveys, and telephone interviews,
- the data collected during the information collection process,

- the methods developed to increase participation in the CAP by wholesalers and retailer, and
- the completed checklists, questionnaires, and telephone interview summaries.

THE BENEFITS OF THE 1991 CAP AUDIT

As the only consulting firm that has performed CAP audits, TechLaw can provide significant benefits to AWPI.

- We recognize that AWPI must meet its obligation to the 1985 Settlement Agreement with EPA in an efficient, cost-effective manner while, at the same time, obtaining the best information possible to guide measures to increase participation in the CAP by wholesalers and retailers. Our experience allows us to adjust the CAP Audit Program to meet the various demands upon AWPI without reinventing the wheel. In addition, TechLaw's experience gained by providing products and services to EPA and other government agencies means that AWPI is assured of work products that meet EPA standards.
- Just as AWPI must meet governmental obligations with regard to the CAP, AWPI must also meet the internal goal of increasing consumer awareness in the most efficient, cost-effective manner possible. Each person contacted by TechLaw not only provides information for AWPI use, but is also educated regarding the purpose of the CAP and is provided with information regarding the proper use and handling of treated wood. TechLaw's auditors are knowledgeable and experienced in transmitting, as well as receiving, information regarding the CAP.

We believe that the 1991 CAP Audit that TechLaw has developed and described above will meet AWPI's goal of obtaining information. The audit can be efficiently and successfully used to motivate wholesalers and retailers to participate in the CAP while still meeting AWPI's reduced 1991 budget.